

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/003291

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H03F3/45

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H03F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 311 144 A (GRASSET JEAN-CHARLES) 10 May 1994 (1994-05-10) column 3, line 37 - column 5, line 7; figure 3	1
A	US 5 339 044 A (PERRAUD JEAN-CLAUDE) 16 August 1994 (1994-08-16) figures 1,2	1-4
A	PATENT ABSTRACTS OF JAPAN vol. 0050, no. 70 (E-056), 12 May 1981 (1981-05-12) & JP 56 020315 A (NIPPON GAKKI SEIZO KK), 25 February 1981 (1981-02-25) abstract	1-4
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

20 December 2004

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28/12/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 0040, no. 67 (E-011), 20 May 1980 (1980-05-20) & JP 55 035516 A (TOSHIBA CORP), 12 March 1980 (1980-03-12) abstract	1-4
A	EP 0 264 160 A (TEKTRONIX INC) 20 April 1988 (1988-04-20) figure 1	1
A	US 5 497 123 A (MAIN W ERIC ET AL) 5 March 1996 (1996-03-05) cited in the application the whole document	1

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International Application No
PCT/IB2004/003291

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5311144	A	10-05-1994	FR 2684252 A1	28-05-1993
			DE 69201297 D1	09-03-1995
			DE 69201297 T2	24-05-1995
			EP 0543708 A1	26-05-1993
US 5339044	A	16-08-1994	FR 2687516 A1	20-08-1993
			DE 69310235 D1	05-06-1997
			DE 69310235 T2	06-11-1997
			EP 0556927 A1	25-08-1993
			JP 6013821 A	21-01-1994
JP 56020315	A	25-02-1981	NONE	
JP 55035516	A	12-03-1980	NONE	
EP 0264160	A	20-04-1988	US 4692712 A	08-09-1987
			DE 3785817 D1	17-06-1993
			DE 3785817 T2	20-01-1994
			EP 0264160 A2	20-04-1988
			JP 1659265 C	21-04-1992
			JP 3020924 B	20-03-1991
			JP 63185206 A	30-07-1988
US 5497123	A	05-03-1996	EP 0718966 A1	26-06-1996
			JP 3575898 B2	13-10-2004
			JP 8242125 A	17-09-1996